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Platform methods: Studying platform urbanism outside the black box

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This intervention reflects on critical perspectives on algorithms and geographical work on the urban-digital interface to highlight a set of approaches for studying the politics of platform urbanism. In several ways, platforms may be understood as black boxes due to the proprietary nature of algorithms, the secrecy of corporate ownership structures, and the emphasis on confidentiality and privacy in the venture capital industry. While thus raising concerns about scrutiny and accountability, inclinations to 'open the black box' of platforms reflect a limited and limiting horizon of political possibility. In a different vein, geographers concerned with the digital-urban interface are working to think about the potential for a counter-politics that is not rooted exclusively in resistance or antagonism. Drawing on these insights, this intervention complements recent work on digital methods by emphasizing tracing, counter-mapping, and proxying as approaches that do not privilege the revelation of visibility so much as potentiality, slipperiness, and movement.

Keywords: platform urbanism, counter-mapping, narrative methods, proxying

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As profit-driven digital platforms mediate core activities of daily life and city governance (van Dijck et al., 2018) and even take on major urban development projects, e.g. Google's Sidewalk Labs in Toronto (Robinson & Coutts, 2019) the relationship between platforms and urban space and society is impossible to ignore (Barns, 2020). Rather than a break with the smart city, platform urbanism coexists with smart urbanism and modulates its "constituent practices, processes, and technologies" (Leszczynski, 2019b, p. 5; Sadowski, 2020). However, an important distinction from top-down smart urban initiatives is the extensive reach of platforms: both into urban governance as "policy entrepreneurs" in local government (Ferreri & Sanyal, 2018; van Doorn, 2019), *and* directly "into the pockets of urbanites" via networked devices (Barns, 2020; Leszczynski, 2019b, p. 5). Platforms further raise some distinct political concerns. Graham (2020) argues they strategically evade accountability by being "simultaneously embedded and disembedded from the space-times they mediate" (p. 2). And despite their historical roots as participatory "ecosystems of interaction" (Barns, 2019, p. 3)[1], platforms are characterized by troubling relations of opacity. Amidst a range of narratives about platform urban futures (Barns, 2020; Leszczynski, 2019b; Sadowski, 2020), this intervention reflects on critical perspectives on algorithms and geographic work on the urban-digital interface to highlight a set of approaches for studying the politics of platform urbanism.

Thinking outside the black box

[1] For example, via application programming interfaces enabling users and developers to extend and remix platform functions (Barns, 2019).

In several ways, platforms may be understood as black boxes: "secret, hidden, unknown" (Bucher, 2016, p. 84). The algorithms that automate classification and decision-making by platforms are largely proprietary (Noble, 2018; Pasquale, 2015). The corporate ownership structures of for-profit platforms demand secrecy to preserve market advantage and shield from legal and public scrutiny (Zook & Graham, 2007). The venture capital industry, the primary backer of platform startups (Langley & Leyshon, 2017), depends on confidentiality and privacy to protect intellectual assets, despite often investing funds from public bodies (Axelrad, 2014). The opacity of actors that are playing a decisive role in the urban process raises immediate concerns about transparency and accountability.

These concerns are longstanding in thinking about the relationship of digital technologies and the city. For example, in 2005 Graham emphasized the need to "open up the 'black boxes' that trap software-sorting" (p. 575). More recently, Safransky (2019) noted the lack of a public process around the algorithms and data production methodologies on which "municipalities increasingly rely…to make critical decisions" (p. 4). But being unable to see inside the black box is not necessarily such "a profound epistemic problem", because opacity is "a basic condition of human life" (Bucher, 2016, pp. 86–87). By emphasizing the unknowable, the black box metaphor may prevent rather than encourage research (Bucher, 2016).

Calls for transparency thus suffer from political and epistemological limits (Ananny & Crawford, 2018; Bucher, 2016; Seaver, 2017). Transparency privileges a politics of revelation predicated on visibility, at once potentially sacrificing "a deeper engagement" and "demanding too little"

(Ananny & Crawford, 2018, p. 974). As Safransky (2019) argues, "mere transparency" is not a substitute for analysis of "political, social, economic, and geographical conjunctures" as "conditions of possibility" for algorithmic harm (p. 7). Platforms also throw up spatio-temporal challenges to the ideal of transparency, that is they raise questions about what visibility means in the context of iterative, recombinatory, and geographically conjunctural systems (Ananny and Crawford, 2018; Bucher, 2016; Barns, 2019; Graham, 2020). Rethinking transparency as a matter of understanding "meaning achieved through relations" of networked humans and nonhumans rather than lifting the lid on the black box (Ananny and Crawford, 2018, p. 977) suggests methodologies that attend to "the messiness that the notion of the block box helps to hide" (Bucher, 2016, p. 94).

The digital-urban interface

Such accounts of algorithms resonate with work on the urban-digital interface, which similarly emphasizes the entanglements of digital networks, bodies, devices, and 'real' (urban) space, that is, the material groundedness of the digital in the everyday and the power relations therein (Ash et al., 2016; Gandy, 2005; M. Graham et al., 2013; S. D. N. Graham, 2005; Leszczynski, 2019d; Mattern, 2017). Geographers have long considered the relationship of the digital and the spatial as hybrid, mutually constituted, and thus impossible to disentangle (Kitchin & Dodge, 2011; Leszczynski, 2019a; Zook & Graham, 2007). Through these entanglements, the digital continually, re-iteratively creates "new forms of urban space: sentient, circulatory, and splintering" (Dodge & Kitchin, 2005; Rose, 2017, p. 780). Nonetheless, a strong strand of dystopian thought runs throughout narratives of the digital urban, with the resultant tendency

to reduce politics to organized resistance. In response, geographers are developing ways of understanding "the thoroughgoing penetration of contemporary urban life by digital practices" in terms that exceed "capture, dispossession, and adverse incorporation" (Elwood, 2020, p. 3). Whether through a focus on the potential of the mundane to shape platform urban futures (Leszczynski, 2019b) "digital practices of life and thriving" rooted in feminist, Black, and queer/trans code studies (Elwood, 2020, p. 4), the radical implications of digital scheming (Lewis, 2018), or "the reinventiveness and the diversity of urban posthuman agency" (Rose, 2017, p. 789), such work highlights multiple political possibilities at the digital-urban interface.

In the remainder of this brief essay, we draw on the insights developed above to think through approaches to researching platform urban politics. With the aim of complementing recent work on digital methods (see especially Leszczynski, 2019c, 2019d), we offer narrative, counter-mapping, and proxying as approaches that do not limit the politics of platform urbanism to black-boxed spaces and processes.

Storying platform urbanism

Narrative approaches can enhance our understanding of the material politics of platform urbanism. Bissell's (2018) analysis of an accident involving an automated Uber vehicle in Tempe, Arizona considers how this single accident was narrated by different people in different places, showing how the force of the accident rippled out to differently affect multiple domains of urban life, even across different cities. Here narrative permits a sense of the multiple sites of transformation the accident catalyzed, indicating how the operation of platforms interface with

the material contingencies of a conjunctural urban ecology. Engaging with and assembling narratives can enable researchers to differently attune to our objects of analysis (Brigstocke & Noorani, 2017), offering potential for evaluating the multiplicity of political sites through which platform urbanism takes place.

Counter-mapping platform urbanism

Platform urbanism underlines the ongoing importance of being attuned to cartography's power relations (Harley, 1989), e.g. through how location-based services like Yelp and Foursquare feed the machinery of gentrification (Payne, 2018). Therefore, bottom-up approaches[2] that seek to change the world through changing cartographic practice are central to grappling with the politics of platform urbanism. For example, the Anti-Eviction Mapping Project (AEMP) combines counter mapping with oral history and public art in its work with communities subject to eviction and dispossession associated with the Bay Area's 'tech boom 2.0' (Maharawal & McElroy, 2018). AEMP specifically seeks to produce non-reductive representations that "feed political imaginations" in ways that are generative and emergent (Maharawal & McElroy, 2018, p. 387). Counter-mapping offers potentials for subversion and transgression of the workings of platform urbanism by situating digital platforms in the experiences of those who both help comprise platform urbanism and are its potentially unwilling subjects.

[2] Such as counter-mapping, counter-cartography, and geographical expeditions (see Counter Cartographies Collective et al., 2012; Peluso, 1995; Thatcher, 2018).

Proxying platform urbanism

Finally, proxying attends to data as it moves (or finds itself obstructed) between social actors, institutions and sites. As Coletta and colleagues (2017) state, "there is value for urban research to attend to the sociotechnical fuzziness of data" (p. 6), proposing the concept of proxies to think through the politics of the urban-digital interface in terms of connection and flow as well as friction, bifurcation, and boundary-marking (see also Bates, 2017). Proxying emphasizes looking at the material conditions and implications of data deployment through contingent and contested social practices, settings, and institutional arrangements (Bates, Lin, & Goodale, 2016; Coletta et al., 2017; Dalton & Stallmann, 2018). For example, Macrorie (forthcoming) considers how a platform for sustainable urban development produces and relies upon digital data by tracing the real-time online standardization, verification, and adjustment of numeric parameters across a variety of practice sites (architectural studios, developers' offices, the factory, the construction site). Resonating with work on data assemblages (Kitchin et al., 2015), proxying speaks to the urban socio-materialities and politics that interact with, and are generated through, data managed by digital platforms.

Conclusion

As digital platforms are woven into urban life, produce urban space, and participate in urban governance, it is vital to interrogate the politics of these socio-technical systems. Yet many of the sites crucial to the development of platform urbanism—such as algorithms, corporate boardrooms, and venture capital offices—are black-boxed. In this intervention we have drawn on critical perspectives on algorithms and geographical work on digital urbanism to highlight

three approaches (storying, counter-mapping, and proxying) to researching the politics of platform urbanism. Critical perspectives on algorithms stress the limited and limiting political horizon of "mere transparency" (Safransky, 2019, p. 7), reminding us that a focus on the apparent opacity of platforms may reify them as external to, rather than thoroughly embedded in, the relations among devices, people, and the urban. While taking seriously the need to apprehend the geographical political economy and the distributional consequences of urban-digital entanglements, geographers also seek to theorize a counter-politics that is not rooted exclusively in resistance or antagonism (Ellwood, 2020). By emphasizing methodological approaches that do not privilege the revelation of visibility so much as potentiality, slipperiness, and mobilities, this intervention similarly looks toward uncharted futures of platform urbanism.

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